

Appl. No. 09/917,175  
Amdt. Dated Oct. 4, 2004  
Reply to Office Action of Jun. 2, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

Claim 1. (currently amended) A golf ball comprising:

a center;

a thread winding layer comprising at least one thread, said at least one thread is compounded in a mixer to have a specific gravity greater than 1.2, and wherein said thread winding layer is disposed over said center creating a core; and,

a cover, wherein said cover is disposed over said core.

Claim 2. (currently amended) The golf ball of claim 1, wherein said at least one thread is comprised of a thermoset rubber material having a specific gravity greater than 1.2.

Claim 3. (previously presented) The golf ball of claim 1, wherein said at least one thread is comprised of a thermoplastic elastomer (TPE) material having a specific gravity greater than 1.2.

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Claim 4. (currently amended) The golf ball of claim 1, wherein said at least one thread comprises at least one high specific gravity filler having a specific gravity greater than 5.6 incorporated into said at least one thread by mixing into the thread during compounding of said at least one thread.

Claim 5. (currently amended) The golf ball of claim 2, wherein said at least one thread further comprises at least one high specific gravity filler having a specific gravity greater than 5.6 mixed into said at least one thread during compounding.

Claim 6. (currently amended) The golf ball of claim 3, wherein said at least one thread further comprises at least one high specific gravity filler having a specific gravity greater than 5.6 mixed into said at least one thread during compounding.

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Claim 7. (originally presented) The golf ball of claim 4, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and zirconium dioxide.

Claim 8. (originally presented) The golf ball of claim 5, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and zirconium dioxide.

Claim 9. (originally presented) The golf ball of claim 6, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and zirconium dioxide.

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Claim 10. (originally presented) The golf ball of claim 4,  
wherein said high specific gravity filler is tungsten.

Claim 11. (originally presented) The golf ball of claim 5,  
wherein said high specific gravity filler is tungsten.

Claim 12. (originally presented) The golf ball of claim 6,  
wherein said high specific gravity filler is tungsten.

Claim 13. (withdrawn) A method of making a thread winding  
layer having a high specific gravity filler comprising the  
steps of:

mixing a rubber and its components and a high specific  
gravity filler to form a mixture;

calendering said mixture;

sheeting said mixture;

curing said mixture; and

slitting said mixture into strips.

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Claim 14. (withdrawn) The method according to claim 13, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and zirconium dioxide.

Claim 15. (withdrawn) The method according to claim 13, wherein said high specific gravity filler is tungsten.

Claim 16. (withdrawn) A method of making a golf ball having high specific gravity threads comprising the steps of:

- mixing a rubber, curatives and a high specific gravity filler to form a mixture;
- calendering said mixture;
- sheeting said mixture;
- curing said mixture;
- slitting said mixture into strips to form at least one heavy thread;
- wrapping said heavy thread around a center forming a core; and
- disposing a cover upon said core.

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Claim 17. (withdrawn) The method according to claim 16, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and zirconium dioxide.

Claim 18. (withdrawn) The method according to claim 16, wherein said high specific gravity filler is tungsten.

Claim 19. (currently amended) A method of making a golf ball having high specific gravity threads comprising the steps of:

wrapping at least one thread compounded to have a specific gravity greater than 1.2 during formulation of the thread around a center forming a core; and disposing a cover upon said core.

Claim 20. (currently amended) The method of claim 19 further comprising the step of:

mixing a high specific gravity filler into said at least one thread during the compounding of the thread wherein said thread is an elastomer.

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Claim 21. (previously presented) The method according to claim 20, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and zirconium dioxide.

Claim 22. (previously presented) The method according to claim 20, wherein said high specific gravity filler is tungsten.

Claim 23. (currently amended) A golf ball comprising:

a center;

a thread winding layer comprising at least one thread, said at least one thread having a specific gravity greater than 1.2 formed during compounding;

at least one high specific gravity filler having a specific gravity greater than 5.6 with a weight of 0.1 to 30% of said at least one thread incorporated into said at least one thread by mixing said high specific gravity filler selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel,

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tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, and ferrous oxide, wherein said thread winding layer is disposed over said center creating a core; and,

a cover, wherein said cover is disposed over said core.

Claim 24. (previously presented) The golf ball of claim 23, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, and barium tungstate.

Claim 25. (previously presented) The golf ball of claim 23 wherein the ball formed has a calculated Moment of Inertia of Ball from 12.4 - 13.4 (g-in<sup>2</sup>).

Claim 26. (previously presented) The golf ball of claim 23 wherein the thread layer has a thickness from 0.05 - 0.35 inches.

Claim 27. (previously presented) The golf ball of claim 23 wherein said center diameter can range from 1.00 - 1.48 inches.



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Claim 28. (previously presented) The golf ball of claim 23 wherein said center weighs from 15 - 35 grams.

Claim 29. (previously presented) The golf ball of claim 23 wherein the core size can range from 1.48 - 1.68 inches.

Claim 30. (previously presented) The golf ball of claim 23 wherein the core weight is from 30 - 40 grams.

Claim 31. (previously presented) The golf ball of claim 23 the diameter of the ball is from 1.58 - 1.78 inches.

Claim 32. (previously presented) The golf ball of claim 23 wherein the weight of the ball is from 40 - 50 grams.

Claim 33. (previously presented) The golf ball of claim 23 wherein the specific gravity of the center is from 1.2 -1.3.

Claim 34. (previously presented) The golf ball of claim 23 wherein the thread layer weight is from 2.5 - 25.0 grams.

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Claim 35. (currently amended) A golf ball comprising:

a center, wherein said center weighs from 15 - 35 grams;

a thread winding layer comprising at least one thread, said at least one thread has a specific gravity greater than 0.94, and said thread winding layer has a specific gravity of 0.7 to 1.25, wherein said thread winding layer is disposed over said center to form a core;

at least one high specific gravity filler having a specific gravity greater than 5.6 having a weight percentage of 0.1% to 30%, and a volume of 0.1 to 10% of said at least one thread, wherein said high specific gravity filler is selected from the group consisting of tungsten, bismuth, copper, bismuth oxide, nickel, cobalt, Iron/steel, tin, chromium, zinc, bismuth subcarbonate, cupric oxide, barium tungstate, cuprous oxide, ferrous oxide and zirconium dioxide, wherein said high specific gravity filler is compounded into said thread during mixing, wherein said thread winding layer is disposed over said center creating a core; and,

a cover, wherein said cover is disposed over said core and the diameter of the ball is from 1.58 - 1.78 inches and has a calculated moment of inertia from 12.4 - 13.4 (g-in<sup>2</sup>).

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Claim 36 (previously presented) The golf ball of claim 35  
wherein said core has a specific gravity of 1.0 to 1.2.